

ATTORNEY DOCKET NO. NL021330 (STNX01-21330)  
U.S. SERIAL NO. 10/538,563  
PATENT

### REMARKS

Claims 1, 4-6, and 9-21 are pending in the application.

Claims 1, 4-6 and 9-21 have been rejected.

No claims have been amended, and reconsideration of the Claims is respectfully requested in light of the following remarks.

#### I. REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1, 4-6, and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiussi (U.S. Published Patent Application No. 2003/0142624) in view of Moore (U.S. Published Patent Application No. 2004/0136370). Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiussi in view of Moore and further in view of Hill (U.S. Published Patent Application No. 2003/0035422). Claims 11-13, 16-18, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Karawai (U.S. Published Patent Application No. 2001/0033581) in view of Chiussi and Moore. Claims 14, 15, 19, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Karawai, Chiussi, and Moore and further in view of Dell (U.S. Published Patent Application No. 2002/0085578). The rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24

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U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142. In making a rejection, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), viz., (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art. In addition to these factual determinations, the examiner must also provide "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." (*In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (cited with approval in *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007)).

The Applicant respectfully submits that the combination of cited references fails to teach or suggest all the claim limitations of independent Claim 1. Specifically, Claim 1 recites, "wherein the guaranteed throughput and best effort control means are arranged for a combined control such that the best effort data scheduling is based on a contention free guaranteed throughput scheduling."

The Office Action concedes that Chiussi does not disclose a guaranteed throughput scheduling that is contention free, as recited in Claim 1. Office Action, page 5. The Office Action attempts to cure this deficiency in the teaching of Chiussi by suggesting that Moore discloses guaranteed throughput scheduling that is contention free.

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However, the system described by Moore has many key requirements to be able to provide contention free guaranteed throughput scheduling, i.e., flows having reserved appointments at each outbound router/switch [0038], routers in the network that can guarantee specific flow rates for Layer 3 traffic [0046], properly setting congestion window maximum size values [0047], and a defined criteria for packet classification [0048]. There are no teachings in Moore that teach or suggest how the key requirements of the system, that are implemented using a complex apparatus, could be implemented on the simple scheduling apparatus described in Chiussi.

Furthermore, the Office Action does not attempt to explain how the proposed combination might be implemented or achieved. Moore does not disclose how its method of providing contention free guaranteed throughput scheduling could be applied to the weighted-round robin (WRR) schedulers described in Chiussi. In the absence of some specific teaching in Moore to indicate how its method of providing contention free guaranteed throughput scheduling could be applied to the apparatus described in Chiussi, the teachings of Moore are inadequate to support the assertion in the Office Action.

As recognized in the Office Action, Moore discloses a system for per flow guaranteed throughput. Office Action, page 5. The system is directed to using network protocols that have window based flow control mechanisms. (Moore, Paragraph [0001].) There are no teachings in Chiussi that indicate that the network protocols used have window-based flow control mechanisms. Therefore, the Office Action does not satisfy the burden to show a reasonable expectation of success for the proposed combination because the Office Action attempts to combine the window-based flow mechanisms with the switching device of Chiussi, without attempting to explain how the proposed combination might be implemented or achieved. Thus, the Applicant respectfully submits the Office Action has failed to establish a prima facie case of obviousness with regard to Claim 1 and that Claim 1 is patentable over the cited references.

Independent Claims 5 and 11 recite limitations analogous to the novel limitations emphasized above in traversing the rejection of Claim 1 and, therefore, also are patentable over the combination of cited references.

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Furthermore, as a separate basis for patentability, Claim 11 also recites, "guaranteed throughput control means to schedule the guaranteed throughput data for transfer through the switching matrix to one of the plurality of outputs of the switching matrix; and best effort control means to schedule the best effort data for transfer through the switching matrix to another one of the plurality of outputs of the switching matrix."

The Office Action concedes that Karawi does not disclose the feature of transferring the guaranteed throughput data to one output and best effort data to another output. Office Action, page 8. The Office Action attempts to cure this deficiency in the teaching of Karawi by suggesting that Chiussi teaches transferring the guaranteed throughput data to one output and best effort data to another output. The Office Action even states that "the guaranteed throughput data is transferred to one of the plurality of outputs of the switching matrix and the best effort data is transferred to the same output". Accordingly the Applicant respectfully submits that Claim 11 is patentable because Chiussi does not teach transferring the guaranteed throughput data to one output and best effort data to another output as noted by the Office Action.

It is an object of the present application "to provide a simplified data switching method" (Page 1, line 28-29). The present application describes the disadvantages of Karawi where the "the multiplicity of classes, priorities and input and output buffers lay a huge burden on the software and hardware requirements of the system" (Page 1, lines 21-25). Moore also has large software and hardware requirements including routers, packet buffers, scheduled end points and a scheduling agent. Hence those with ordinary skill in the art would have no motivation to combine Karawi and Moore with Chiussi.

Therefore, the Applicant respectfully submits that independent Claim 11 is patentable over the cited references.

With respect to the rejection of Claim 10 over Chiussi in view of Moore and further in view of Hill, for the same or similar reasons set forth above, and because the cited portion of Hill fails to cure the noted deficiency in Chiussi and Moore, Claim 10 is also patentable.

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With respect to the rejection of Claims 12, 13, 16-18, and 21 over Karawai in view of Chiussi and Moore, for the same or similar reasons set forth above, and because the cited portion of Karawai fails to cure the noted deficiency in Chiussi and Moore, these claims are also patentable.

With respect to the rejection of Claims 14, 15, 19, and 20 over Karawai, Chiussi, and Moore and further in view of Dell, for the same or similar reasons set forth above, and because the cited portion of Dell fails to cure the noted deficiency in Karawai, Chiussi, and Moore, these claims are also patentable.

Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejection of Claims 1, 4-6 and 9-21.

## II. CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

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If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *rmccutcheon@munckcarter.com*.

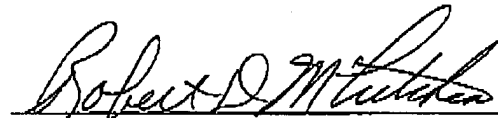
The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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12/22/2008



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